

Heterogeneous Effects of the Deferred Action for Childhood Arrivals (DACA) on Undocumented College Students' Educational Outcomes

Keitaro Okura 

Yale University, New Haven, USA

Amy Hsin

Queens College, City University of New York, USA

Sofya Aptekar

*City University of New York School of Labor and Urban Studies,
New York, NY, USA*

Abstract

We investigate why prior studies examining the effects of the Deferred Action for Childhood Arrivals (DACA) on undocumented youth's college outcomes in the United States have yielded mixed findings. We draw on unique administrative data from the City University of New York at the time of DACA's implementation and utilize difference-in-difference estimation to examine DACA's effects on undocumented students' college GPA and interruptions to their college progress. We find that DACA's effects on the educational outcomes of undocumented students enrolled in college were heterogeneous: It had a negative effect on those who, prior to the policy, were academically high performing and taking on a heavy courseload, while it had no significant impact on low academic performers and those maintaining a light courseload. We offer a plausible

Corresponding Author:

Keitaro Okura, Yale University, New Haven, USA.

Email: Keitaro.okura@yale.edu

explanation for this finding: DACA's newfound legal employment opportunities may have incentivized undocumented youth who were previously focused on schooling to seek out employment. In contrast, DACA may have had little impact on low achievers because they were more likely to be already working. While our study is unable to directly identify employment status, our finding that academically achieving students were negatively affected by DACA suggests that the liminal legality experienced by undocumented 1.5-generation youth has a substantive impact on their educational integration and assimilation trajectories. We contend that stopgap programs like DACA that offer contingent rights do not result in unalloyed positive benefits because they do not address undocumented youth's underlying legal precarity.

Keywords

DACA, undocumented students, educational outcomes

Introduction

Of the estimated 11 million undocumented immigrants residing in the United States, roughly 2.7 million are youth who entered the country before their 16th birthdays (Center for Migration Studies of New York 2019). This subgroup of undocumented migrants is collectively referred to as “dreamers” and are popularly perceived as more deserving of rights than undocumented adults because they migrated as children (Sirriyeh 2020). Undocumented migrants in the United States reside in the country without legal authorization, and as a result, they cannot legally work and are vulnerable to deportation. Despite popular public sympathy for dreamers, multiple legislative efforts to extend pathways to citizenship for this group have failed. In the summer of 2012, under pressure from a growing social movement of immigrant rights activists demanding a solution to this legislative impasse, President Barack Obama enacted the Deferred Action for Childhood Arrivals (DACA) through executive order (Preston and Cushman 2012). The program did not offer full rights to citizenship or opportunities to seek them. Instead, it offered eligible undocumented youth two benefits: (1) two-year renewable work permits and (2) temporary reprieve from deportation.¹

¹ Individuals are eligible to apply for DACA if they meet the following seven criteria: (1) under the age of 31 as of June 15, 2012; (2) came to the United States under the age of 16; (3) have continuously resided in the United States between June 15, 2007 to the present; (4) had no lawful status on June 15, 2012; (5) were physically present in the United States on June 15, 2012, and at the time of making the request for consideration of deferred action with USCIS; (6) are currently in school, have graduated from high school, have obtained a GED, or honorably discharged from the Coast Guard or armed forces; (7) have not been convicted of a felony, a significant misdemeanor, or more than three misdemeanors of any kind, and do not pose a threat to national security or public safety (USCIS 2018).

As of December 2020, roughly 611,000 undocumented youth of the estimated 1.16 million immediately eligible population were granted DACA (Migration Policy Institute 2022).²

Existing studies on the effects of DACA suggest that the program has improved the lives of recipients and their families in many ways, notably psychologically and socioeconomically (Gonzales et al. 2016; Patler, Hamilton, and Savinar 2021; Patler and Pirtle 2018; Vaquera, Aranda, and Sousa-Rodriguez 2017). Studies that focus on DACA's impact on college enrollment and academic outcomes, however, have yielded more mixed findings. Some find that DACA had small positive effects on college attendance (Kuka, Shenhav, and Shih 2020), while others find that DACA increased youth labor force participation at the expense of college attainment (Amuedo-Dorantes and Antman 2017; Hsin and Ortega 2018; Pope 2016). The effects of DACA on undocumented students' college outcomes may be mixed because it has heterogeneous effects on undocumented youth. For instance, a recent study by Hamilton, Patler, and Savinar (2021) proposed that for some youth, DACA made college attendance a possibility, while for a different set of youth, it encouraged them to prioritize work over schooling (Hamilton, Patler, and Savinar 2021).

We investigate DACA's effects on undocumented college students' academic performance and stopout rates and consider differential effects of the policy by prior student academic engagement, which we define along two dimensions: academic GPA (high and low performers) and courseload (heavy and light course-takers).³ We motivate this analysis by reasoning that prior academic engagement may signal differential pre-DACA work commitments, which could moderate how DACA impacts undocumented youth's work and schooling investments.

We explore the differential effects of DACA by drawing on unique administrative data on undocumented students attending the City University of New York (CUNY). Focusing on a subset of students attending college in New York, rather than California, at the time of DACA's implementation allows us to analyze the association between DACA's passage and the educational trajectories of immigrant college students in a less researched local context of reception. While relatively supportive of

²In July 2021, Judge Andrew Hanen found that the Department of Homeland Security (DHS) lacked the authority to implement DACA (Garcia 2022). The ruling allowed existing DACA recipients to renew their status but blocked new DACA applicants. In response, the Biden administration codified DACA into regulatory law and rescinded the 2012 memo that originally created DACA through DHS. A federal appeals court is currently reviewing the July 2021 ruling; in the meantime, current DACA recipients can renew their status, but first-time applicants are unable to apply to the program (Garcia 2022).

³We use the term "stopout," as opposed to "dropout," because of undocumented students' financial and legal precarity that often forces them to, at least temporarily, halt their educational progress (Garcia and Tierney 2011).

immigrants, New York has lagged behind California in the provision of state financial aid for undocumented college students. These differences in local contexts of reception can shape the effects of immigration status on the educational integration of the undocumented 1.5-generation youth.

This study proceeds as follows. First, we discuss prior literature that has investigated the effects of DACA on educational outcomes, and we propose an underexplored explanation for mixed findings: DACA affects different types of students differently. Through difference-in-difference analyses, we find evidence for the claim that DACA had negative effects on undocumented college students who had been academically high performing and engaged in more coursework while it had neutral effects on those who were less academically engaged. These findings contribute to the literature on educational integration and social mobility of the 1.5 immigrant generation by demonstrating the complicated effects of liminal legal status. We might expect DACA to have unallayed positive effects on educational achievement and subsequent social mobility simply because this status is a marked improvement on the DACA-less state of illegality, but our analysis points to a more complex picture. Moreover, although this study focuses on the U.S. context, our findings carry broader implications for migrant youth in other countries who also occupy a precarious legal status. Notably, we contend that while programs like DACA that offer contingent rights have proliferated across wealthy countries in the Global North in recent years (Makan 2022), such efforts can have unanticipated effects because they do not address the underlying legal liminality experienced by undocumented migrants.

The Effect of DACA and Educational Outcomes

Does removing legal barriers to employment increase or decrease undocumented youth's educational investments? How might a temporary work permit program like DACA influence work-schooling decisions of undocumented students? The existing literature examining the effects of DACA suggests two related hypotheses—that providing legal work opportunities positively *or* negatively affects undocumented students' educational outcomes—are theoretically plausible (Gonzales et al. 2016). On the high-school level, both qualitative and quantitative studies consistently show that DACA positively influenced undocumented youth's high-school graduation rates (Abrego 2018; Kuka, Shenhav, and Shih 2020). A recurrent theme in interview-based studies of DACA recipients is that the program increased their motivation to graduate from high school (Gonzales and Burciaga 2018). Since obtaining a high school diploma or General Education Development (GED) degree is an eligibility requirement of DACA (Kuka, Shenhav, and Shih 2020), it is not surprising that DACA would incentivize high school graduation.

In contrast, DACA's impact on undocumented youth's postsecondary schooling outcomes is more complicated. In theory, even those who prefer to work than continue their education could feel encouraged by DACA to attend college in order to increase their earnings potential and long-term social mobility. However, the immediate legal

work opportunities provided by DACA may also be an economically attractive option—or a necessary one—for undocumented young adults, many of whom come from underprivileged backgrounds, help financially support their families, and face higher costs of attending college in most states due to their undocumented status (Enriquez 2017; Hamilton, Patler, and Savinar 2021). Furthermore, DACA's temporary nature may further complicate how undocumented youth take advantage of the program (Greenman and Hall 2013; Patler, Hamilton, and Savinar 2021). Some undocumented youth may rationalize, quite reasonably, that investing in college education may not pay off if DACA is easily rescinded in the future.

In a recent study, Kuka, Shenhav, and Shih (2020) estimate DACA's effect on college enrollment with data from the American Community Survey. Employing difference-in-difference estimations, they find that DACA had positive effects on Hispanic females' college enrollment and smaller but still positive effects on Hispanic males' college enrollment. Moreover, several qualitative studies have made similar claims. For instance, through interviews with undocumented youth, Abrego (2018) reported that DACA motivated respondents to attend college, while Gonzales et al. (2016) similarly observed that undocumented youth who received DACA while already attending college benefited psychologically, which led to better performance at their schoolwork.

In contrast, other studies suggest more neutral or negative effects of DACA on college attainment. Pope (2016), for example, reported that DACA increased the labor force participation of college-aged youth who were likely undocumented and had a marginal effect on their college enrollment, while Amuedo-Dorantes and Antman (2017) found that DACA increased the labor force participation and reduced the college enrollment of high-school graduates who were likely undocumented. Meanwhile, Hsin and Ortega (2018) analyzed administrative data on undocumented students attending a large urban university system. They found that DACA's effects varied by institution type: at four-year colleges, DACA increased undocumented students' stopout rates, while at community colleges, DACA reduced the share of students attending school on a full-time basis but had no effect on their stopout rates. They concluded that DACA incentivized work over schooling for many undocumented college students but that its effects on stopout rates depended on how easily schools accommodated working students. Together, past studies offer mixed findings regarding DACA's impact on undocumented students' outcomes in their postsecondary education.

Heterogeneous Effects of DACA

An underexplored explanation for these inconsistent findings is that DACA affects different types of students differently. A rare exception in the literature that considers heterogeneous effects is Hamilton et al.'s (2021) mixed-methods study of DACA recipients in California. Their study's quantitative component analyzed the California Health Interview Survey and found a null effect of DACA on

postsecondary educational outcomes, but their in-depth interviews suggested that this result masked four heterogeneous effects on undocumented youth: (1) DACA made college possible; (2) DACA made college easier; (3) DACA encouraged work over school; and (4) college was no longer an option by the time DACA was created (Hamilton, Patler, and Savinar 2021).

To remedy the scarcity of studies examining heterogeneous effects, we build on Hamilton, Patler, and Savinar (2021) by examining DACA's differential impact on undocumented youth who were enrolled in college at a large public university system in New York City when DACA began. Broadly, we examine whether DACA's effects on educational outcomes are contingent on prior academic engagement, which are proxied by two measures: GPA and courseload. We hypothesize that DACA's impact will be more negative for students who, prior to the policy, were focused more on their schooling, while the effects will be neutral or even positive for students who exhibited low levels of academic engagement prior to DACA.

We formulate this hypothesis because levels of academic engagement may be plausibly linked to prior work commitments. We infer that undocumented students who were academically engaged (earning high GPA and/or taking on a heavy courseload) prior to DACA were less likely to be employed or working fewer hours, while we presume that students who were less academically engaged (earning low GPA and/or taking on a light courseload) prior to DACA were more likely to be employed or working more hours. Although this link between academic engagement and work status is a key assumption of our analysis because we do not have information on student employment, existing studies that examined the relationship between employment and college educational performance suggest that working has a negative effect on college outcomes such as GPA (DeSimone 2008; Trockel, Barnes, and Egget 2000).

DACA arguably had an important effect on the relationship between academic engagement and work commitments for undocumented youth. Prior to DACA, many students eschewed working out of fear of deportation and other legal risks (Hamilton, Patler, and Savinar 2021). Importantly, this decision not to work was not likely because they were financially stable but rather *despite* significant financial pressures: the median annual income of undocumented immigrants remains significantly lower relative to the U.S.-born (Ro and Hook 2021). In a 2013 survey, nearly 80 percent of DACA beneficiaries reported being eligible for free or reduced lunch during high school, while 54 percent reported that their household was unable to pay for utilities at some point in the prior year (Gonzales et al. 2016). Avoiding employment due to legal precarity may have allowed undocumented college students an inadvertent benefit of channeling their energy into their schoolwork. It is for these students in particular—those who wanted to work but chose instead to focus on school instead because of legal risks—that DACA may cause negative outcomes. In contrast, students who pre-DACA sought out employment may see little changes in their work-school balance after DACA and the availability of official avenues of employment.

Using this logic, we ask the following research questions: How did DACA affect undocumented college students' stopout rates and GPA? How did these effects vary

by students' pre-DACA academic performance and courseload? We hypothesize that undocumented students whose academic engagement levels were high prior to DACA would experience more negative effects in their academic outcomes, while students who were academically underperforming would see little changes in their GPA or stopout rates. Although the data on which we draw do not contain direct information regarding students' employment status, we motivate our hypothesis by linking pre-DACA academic engagement to their prior work commitments. In the scenario outlined previously, academically engaged students may have had more to "lose" in terms of their educational outcomes if legal work options diverted attention away from schooling and toward new found employment opportunities.

Data and Methods

Data

We draw on unique administrative data from the City University of New York. CUNY educates over 270,000 students across 25 undergraduate campuses, seven of which are community colleges (CUNY 2022).⁴ We focus on the cohort who entered college from Spring 2010 to Fall 2012 and follow them until Fall 2014. We restrict our analytical sample to the subset of students enrolled in college before and after DACA's passage in 2012. We do so to avoid potential bias that may be introduced if DACA motivated different types of students to enroll in college (Kuka, Shenhav, and Shih 2020). If differential selection had occurred, cohorts that entered post-DACA would be systematically different from those who entered pre-DACA. Our analytical sample includes 67,966 students attending community colleges and 55,783 students attending 4-year colleges across the many college campuses in the CUNY.

Measures

Our outcome variables of interest are stopout and college GPA. We use a dummy variable to measure stopout, with $\text{stopout} = 1$ if a student who was previously enrolled was no longer enrolled in a given semester. College GPA is a continuous

⁴Community colleges in the United States are distinct from traditional colleges in several important ways. First, full-time students take two years to complete a community college and earn an associate's degree, whereas traditional colleges take four years and reward a bachelor's (BA) degree. After graduating from a college community, students may transfer to a liberal arts college or university to complete a BA degree. Second, community colleges are generally more affordable and therefore typically enroll more lower-income students from the local community than 4-year colleges. Because of this different student body composition, community colleges typically offer more flexible courses and academic progression timelines to accommodate for students who manage additional (e.g., work, family) responsibilities.

variable that measures the grade point average earned in each semester. We standardize GPA by subtracting the mean and dividing by the standard deviation.

The main explanatory variable is the student's immigration and legal status. To qualify for in-state tuition, undocumented students must self-identify as undocumented and provide a notarized affidavit stating that they will pursue steps to obtain legal residency if such options become available (Hsin and Ortega 2018). Yearly out-of-state tuition for a full-time student at CUNY was about \$17,000 at 4-year colleges and \$9,600 at community colleges in 2016, compared to \$6,500 and \$4,800, respectively, for New York State residents (CUNY 2022).

Legal status is measured as a dummy variable indicating whether the student was undocumented. Individuals who obtained their high school degree outside the United States and self-reported as undocumented and individuals who obtained their high school degree in the United States but outside New York are excluded from the analytical sample. This step was taken to eliminate international students or out-of-state students with legal status who might self-report undocumented status to access in-state tuition rates.

We stratify our analysis by two key variables. First, we stratify our analysis by low versus high performers. Low-performers are students whose pre-DACA cumulative GPA was below the sample mean at their respective institutions. High performers are students whose pre-DACA cumulative GPA was above the sample mean at their respective institutions. Second, we stratify our analysis by courseload. Light courseload takers are students whose course credit totals in the pre-DACA semesters were below the sample mean in their respective institutions. Heavy courseload takers are students whose course credit totals in the pre-DACA semesters were above the sample mean in their respective institutions.⁵

Analytical Strategy

We adopt the following analytical strategy. We estimate DACA's effect on college stopout and college grade-point-average, using difference-in-differences regressions. Our empirical strategy follows similar studies that exploit changes in the outcome variables for undocumented students before and after DACA, relative to changes for students who are legal residents (i.e., legal permanent residents and citizens) over the same time period (Amuedo-Dorantes and Antman 2017;

⁵We also assessed the robustness of our results across different specifications of low and high performing. We estimated different specifications, including models that examined effects among groups greater than 2 standard deviations (SD) below the mean, 1 SD below, 1 SD above, and greater than 2 SD above mean. We also estimated models that stratified groups into the bottom 1/3, middle 1/3, and top 1/3 of the distribution for high school GPA, as well as cumulative GPA in college and course-taking to distinguish ability. Overall, the results are not substantively different from one another.

Hsin and Ortega 2018; Pope 2016). Netting out the changes in outcomes for students with legal residence allows us to purge the effects of factors that cannot be observed but that affected all students similarly, such as changes in local economic conditions. Importantly, we investigate DACA's heterogeneous effects on college stopout and performance. To do so, we stratify our analysis by low versus high performers and by light versus heavy course-takers.

We utilize the following difference-in-difference estimation:

$$Y_{ict} = a_i + a_c + a_t + b\text{Post}_t * \text{Undoc}_i + e_{ict}. \quad (1)$$

In equation (1), Y_{ict} is the outcome variable in semester t for student i in cohort c . The specification includes individual fixed-effects, denoted by α_i , that absorb all time-invariant characteristics of individuals (such as ability, motivation, race/ethnicity, and family background). Our specification also includes fixed-effect for semester year (α_t) and cohort (α_c). The former account for time-varying aggregate effects, such as local labor market conditions, and the latter fixed-effect accounts for differences in stopout rates (and full-time status) as a student progresses toward graduation. Dummy variable Undoc_i indicates whether student i reported being undocumented, and Post_t is an indicator variable marking DACA's rollout. Lastly, the disturbance term e_{ict} captures all idiosyncratic variation in the outcome variable that is not picked up by regressors. We restrict the sample to only students who were currently enrolled.

The parameter β , the coefficient on the interaction term between Post_t and Undoc_i , is the key parameter of interest. This coefficient is identified by the changes in the outcome variable for undocumented students before and after DACA, net of changes for documented students in the same time period.

One important caveat is that we cannot determine DACA eligibility perfectly. Among the many criteria of DACA eligibility is a high-school degree (or a GED or honorable discharge from the Armed Forces), arrival in the United States before age 16, continuous residence in the United States since 2007, and a clean criminal record (USCIS 2018). While all students in our sample fulfilled the first requirement, we cannot know if they fulfilled the other requirements. It is likely that most undocumented students in our data were DACA eligible, and our estimates of β should be interpreted as *intent-to-treat* effects. It is probable that the average treatment effects (on the treated) are substantially larger because not all eligible individuals applied for DACA. As of March 31, 2014, nearly 50 percent of eligible youth who resided in New York had applied for DACA (Batalova, Hooker, and Capps 2014), and nearly 95 percent of those who applied were approved (USCIS 2018). This compliance ratio implies that the *average treatment* effect (on the treated) will be about twice as large as the *intent-to-treat* effect.

Table 1. Difference-in-Difference Results, Stopout, Heterogeneous Effects.

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	Community college				4-year college			
	Low performing	High performing	Light course-load	Heavy course-load	Low performing	High performing	Light course-load	Heavy course-load
DACA x Undocumented	0.007 (0.016)	-0.001 (0.007)	0.003 (0.013)	0.011* (0.007)	0.01 (0.008)	0.029*** (0.005)	0.012 (0.008)	0.028*** (0.004)
R ²	0.09	0.01	0.01	0.00	0.09	0.00	0.02	0.01
N	36,022	31,944	35,342	32,624	30,680	25,103	30,681	25,102

* $p < .1$; ** $p < .05$; *** $p < .001$

Timing of DACA Implementation

DACA was announced in June 2012, and the first applications were accepted in August 2012 (USCIS 2018). Very few applications were approved in September or October 2012, but approvals climbed significantly between October and December 2012. The vast majority of DACA approvals occurred after December 2012 (USCIS 2018). Thus, any anticipated effect of DACA occurred post-December 2012 during the 2013 Spring semester and beyond.

Results

Heterogeneous Effects of DACA on Academic Outcomes

We begin by examining DACA's heterogeneous effects on stopout rates. Table 1 stratifies difference-in-difference regressions on stopout rates by low and high performing and by light and heavy courseload at community and 4-year colleges.

Table 1 reveals two noteworthy findings. First, students who took a heavy courseload prior to DACA were more likely to stop out at both community and 4-year colleges. These results provide evidence for our hypothesis that DACA encouraged students who may have been reluctant to work without legal authorization and/or had alternative sources of economic support to pay for college to increase employment activities post-DACA, to the detriment of college attendance. On the other hand, DACA had no significant effect on the stopout rates of students who were taking a light courseload prior to the program's implementation. Such students may have already been employed pre-DACA.

The second noteworthy finding is that DACA significantly increased stopout rates among previously high-performing students at 4-year colleges but had no significant effect on previously low-performing students at 4-year colleges. Together, these results suggest that a key reason DACA reduced college retention at 4-year colleges in New York is because the introduction of work authorization motivated high-performing, academically engaged students who were taking the most course-credits to leave or deprioritize school, presumably to work.

Examining heterogeneous effects also uncover new findings on DACA's effect on stopout rates at community colleges. Whereas Hsin and Ortega (2018) found no significant effects of DACA at community colleges, we find that DACA lowered the retention of community-college students who took the heaviest courseload. These findings suggest that while differences in institutional types may impact undocumented youth's educational outcomes, there may also be heterogeneous effects *within* different college types based on pre-DACA work commitments.

Next, we move to consider DACA's heterogeneous effect on college GPA. The pattern of results presented in Table 2 mirrors the pattern of results for stopout rates. In general, our analysis indicates that DACA had negative effects on college performance among the most academically engaged students—those who were the highest performing and those who took the most courses—than among less

Table 2. Difference-in-Difference, GPA, Heterogeneous Effects.

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	Community college				4-year college			
	Low performing	High performing	Light course-load	Heavy course-load	Low performing	High performing	Light course-load	Heavy course-load
DACA x Undocumented	0.053 (0.064)	-0.086*** (0.028)	0.002 (0.040)	-0.077** (0.034)	-0.078 (0.050)	-0.077*** (0.020)	-0.052 (0.055)	-0.079*** (0.022)
R ²	0.02	0.03	0.02	0.03	0.02	0.02	0.03	0.02
N	36,022	31,944	35,342	32,624	30,680	25,103	30,681	25,102

* $p < .1$; ** $p < .05$; *** $p < .001$

academically engaged students. These results are similar for students at community colleges and at 4-year colleges. For example, at 4-year colleges, we see that students who took a heavy courseload saw their GPA significantly decline by 0.079 standard deviations, while at community colleges the decrease was also significant at 0.077 standard deviations. We likewise reason that students enrolled in many college courses prior to DACA were less likely to be working relative to those taking fewer courses; thus, DACA's introduction had a negative impact on their ability to balance work and schooling.

Discussion and Conclusion

This study examined DACA's effects on the educational incorporation of undocumented 1.5-generation immigrants, measured by their academic performance and stopout rates at the time of DACA's implementation. We find that DACA's impact on academic outcomes vary by students' prior levels of academic engagement. Specifically, DACA's downward pressure on educational outcomes appears to be driven primarily among the most academically engaged undocumented college students (i.e., those who were academically high performing and taking a heavy courseload) while it conversely had no impact on undocumented students who were academically underperforming and maintaining a light courseload.

What explains DACA's differential effects by prior academic engagement? We speculate that DACA's heterogeneous effects can be plausibly explained by undocumented students' labor market participation prior to DACA. Even before the work-permit program was introduced, many undocumented students were already employed without work authorization to help financially support their family and finance their college education (Abrego 2018; Gonzales 2015). For these students, DACA and the legal work opportunities it offered may have had a limited impact on college outcomes because their existing work commitments were already likely to be exacting a toll on their academic performance. In contrast, DACA's implementation could have had more detrimental ramifications for students who were high achieving and taking more courses because they were less likely to be working or working fewer hours. By offering these types of students work authorization, DACA may have incentivized high-performing students to direct their focus away from school and toward previously unavailable employment opportunities, consequently leading to a decline in their academic performance and retention rates.

This study is not without caveats. First, we reiterate that the link we propose between undocumented students' prior academic engagements and their work commitments is speculative and constrained by data limitations. We cannot rule out alternative (or additive) reasons why highly academically engaged students uniquely experienced declines in their educational outcomes. For instance, it could be that high motivated students were more likely to take on greater responsibilities for their undocumented families with DACA's newfound benefits, which includes both work opportunities and relief from the threat of deportation. However, we

maintain that even such explanations are most plausibly explained through changes in work commitments, and we encourage future studies to directly tackle this question.

Second, although a key strength of our analysis is our ability to accurately identify undocumented status, we are unable to distinguish between DACA-recipients and eligible non-recipients. As a result, we cannot rule out the possibility that our findings can be partly explained by differential selection into DACA. Finally, our findings' generalizability to other regions of the United States may be limited. More undocumented immigrants reside in New York City than any other metropolitan area, and 80 percent of undocumented students who attend college attend CUNY (DiNapoli and Bleiwas 2014). Thus, while our study is largely representative of undocumented college students who reside in New York City, we cannot know whether our findings hold in a different context where students are offered different levels of financial and social support for college. The context of reception in New York may be considered moderately immigrant-friendly: resident undocumented youth pay in-state tuition but, unlike California or New Jersey, could not access state-funded financial aid before 2019 (Goldbaum 2019). Thus, on the range of DACA's anticipated effects on college outcomes, we expect that our estimates are less negative relative to states where the cost of college attendance is higher (e.g., Alabama and South Carolina) but more negative relative to states where the cost of college attendance is lower (e.g., California and New Jersey).

The work of various scholars has shown that DACA's temporary nature and the political uncertainty over its future likely complicated undocumented college students' desire to further their education (Cebulko 2014; Hamilton et al. 2021; Patler 2018; Roth 2019). These studies show that DACA provided only liminal legality to undocumented students, offering temporary, renewable work authorization but no pathways to permanent residency. Moreover, DACA could not permanently remove the threat of deportation or guarantee that work permits would be renewed after they expired. As a program enacted by executive action rather than through regular legislative channels, DACA could be rescinded by a new presidential administration at. As a result, the program's future was always uncertain. The reservations and fears many held regarding DACA's fate proved to be warranted when Donald Trump attempted to terminate DACA. It is likely that comprehensive immigration reform at the congressional level that grants permanent legal status, as opposed to DACA's liminally protected status, would do more to improve social mobility of this segment of the 1.5-generation immigrants (Menjivar 2006).

DACA also did nothing to directly lower the cost of college attendance for a generally impoverished population prevented from accessing most forms of college financial aid. Notably, by offering legal work permits without lowering barriers to college enrollment, DACA may have incentivized some students to channel their energies toward newfound employment opportunities at the cost of their schooling outcomes. While we cannot rule out the possibility that DACA may have allowed some undocumented students to remain enrolled in college (those who otherwise

would have stopped out of college due to financial constraints), these school-work tradeoffs could be entirely avoided if there were lower financial barriers to college enrollment. They could also be reduced if college education were free, as it was at CUNY until 1976 (Attewell et al. 2009). In particular, having access to federally funded tuition aid (Pell Grants) or work opportunities (work-study programs) targeted towards students with financial needs would likely have a significant impact on how undocumented youth approach their schooling and set educational goals. In sum, granting permanent legal status accompanied by changes in federal financial aid policies would allow undocumented youth to set and reach expanded educational goals, improving their odds of intra- and inter-generational social mobility.


Declaration of Conflicting Interests

The author(s) declared no potential conflicts of interest with respect to the research, authorship, and/or publication of this article.

Funding

The author(s) received no financial support for the research, authorship, and/or publication of this article.

ORCID iD

Keitaro Okura  <https://orcid.org/0000-0001-9061-7490>

References

- Abrego, L. J. 2018. "Renewed Optimism and Spatial Mobility: Legal Consciousness of Latino Deferred Action for Childhood Arrivals Recipients and Their Family in Los Angeles." *Ethnicities* 18 (2): 192–207. <https://doi.org/10.1177/1468796817752563>.
- Amuedo-Dorantes, C., and F. Antman. 2017. "Schooling and Labor Market Effects of Temporary Authorization: Evidence from DACA." *Journal of Population Economics* 30 (1): 339–73. <https://doi.org/10.1007/s00148-016-0606-z>.
- Attewell, Paul, David Lavin, Thurston Domina, and Tania Levey. 2009. "Passing the Torch: Does Higher Education for the Disadvantaged Pay Off Across the Generations?" *Russell Sage Foundation*.
- Batalova, J., S. Hooker, and R. Capps. 2014. "DACA at the Two Year Mark: A National and State Profile of Youth Eligible and Applying for Deferred Action." *Migration Policy Institute*.
- Cebulko, K. 2014. "Documented, Undocumented, and Liminality Legal: Legal Status During the Transition to Adulthood for 1.5-Generation Brazilian Immigrants." *The Sociological Quarterly* 55: 143–67. <https://doi.org/10.1111/tsq.12045>.
- Center for Migration Studies of New York. 2019. "Estimates of Undocumented and Eligible-to-Naturalize Populations by State." Accessed January 14, 2022. <http://data.cmsny.org>.
- City University of New York. 2022. <https://www.cuny.edu/about/colleges-schools/>.

- DeSimone, J. S. 2008. "The Impact of Employment during School on College Student Academic Performance." NBER Working Paper. 10.3386/w14006.
- DiNapoli, T. P., and K. B. Bleiwas. 2014. "Update: The NY DREAM Act. Office of the State Comptroller, New York City Public Information Office." Retrieved from: <https://www.osc.state.ny.us/osdc/rpt11-2014.pdf>.
- Enriquez, L. E. 2017. "A 'Master Status' or the 'Final Straw'? Assessing the Role of Immigration Status in Latino Undocumented Youths' Pathways Out of School." *Journal of Ethnic and Migration Studies* 43 (9): 1526–43. <https://doi.org/10.1080/1369183X.2016.1235483>.
- Garcia, Uriel J. 2022. With a Court Ruling Looming, Young Texas Immigrants Prepare for the Possible End of DACA." *The Texas Tribune*. <https://www.texastribune.org/2022/09/01/texas-daca-undocumented-court-ruling/>.
- , and W. Tierney. 2011. "Undocumented Immigrants in Higher Education: A Preliminary Analysis." *Teachers College Record* 113 (12): 2739–76. <https://doi.org/10.1177/016146811111301210>
- Goldbaum, Christina. 2019. "Dream Act is Approved in New York to Aid Undocumented Students, in Rebuke to Trump." *New York Times*. <https://www.nytimes.com/2019/01/23/nyregion/dream-act-bill-passed.html>.
- Gonzales, Roberto G. 2015. *Lives in Limbo: Undocumented and Coming of Age in America*. Oakland, California: University of California Press.
- , and E. M. Burciaga. 2018. "Segmented Pathways of Illegality: Reconciling the Coexistence of Master and Auxiliary Statuses in the Experiences of 1.5-Generation Undocumented Young Adults." *Ethnicities* 18 (2): 178–91. <https://doi.org/10.1177/1468796818767176>.
- , B. Roth, K. Brant, J. Lee, and C. Valdivia. 2016. "DACA At Year Three: Challenges and Opportunities in Accessing Higher Education and Employment. New Evidence from the National UnDACAmented Research Project." American Immigration Council, Special Report, February.
- Greenman, E., and M. Hall. 2013. "Legal Status and Educational Transitions for Mexican and Central American Immigrant Youth." *Social Forces* 91 (4): 1475–98. <https://doi.org/10.1093%2Fsf%2Fsot040>.
- Hamilton, E., C. Patler, and R. Savinar. 2021. "Transition into Liminal Legality: Daca's Mixed Impacts on Education and Employment among Young Adult Immigrants in California." *Social Problems* 68 (3): 675–95. <https://doi.org/10.1093/socpro/spaa016>.
- Hsin, A., and F. Ortega. 2018. "The Effects of Deferred Action for Childhood Arrivals on the Educational Outcomes of Undocumented Students: Evidence from a Large Public University." *Demography* 55 (4): 1487–506. <https://doi.org/10.1007/s13524-018-0691-6>.
- Kuka, E., N. Shenhav, and K. Shih. 2020. "Do Human Capital Decisions Respond to the Returns to Education? Evidence from DACA." *American Economic Journal: Economic Policy* 12 (1): 293–324. <https://doi.org/10.1257/pol.20180352>.
- Makan, Ajay. 2022. "How Portugal Quietly Became a Migration Hub." <https://foreignpolicy.com/2022/05/21/portugal-europe-migration-undocumented-work-residency-citizenship-south-asia/>.

- Menjívar, Cecilia. 2006. "Salvadoran and Guatemalan Immigrants' Lives in the United States." *American Journal of Sociology* 111 (4): 999–1037. <https://doi.org/10.1086/499509>
- Migration Policy Institute. 2022. "DACA Recipients & Eligible Population, by State." <https://www.migrationpolicy.org/programs/data-hub/deferred-action-childhood-arrivals-daca-profiles>.
- Patler, C. 2018. "Citizen Advantage, Undocumented Disadvantage, or Both? The Comparative Educational Outcomes of Second and 1.5-Generation Latino Young Adults." *International Migration Review* 1: 31. <https://doi.org/10.1111/imre.12347>.
- , E. R. Hamilton, and R. L. Savinar. 2021. "The Limits of Gaining Rights While Remaining Marginalized: The Deferred Action for Childhood Arrivals (DACA) Program and the Psychological Wellbeing of Latina/o Undocumented Youth." *Social Forces* 100 (1): 246–72. <https://doi.org/10.1093/sf/soaa099>.
- , and W. L. Pirtle. 2018. "From Undocumented to Lawfully Present: Do Changes to Legal Status Impact Psychological Wellbeing Among Latino Immigrant Young Adults?" *Social Science and Medicine* 199: 39–48. <https://doi.org/10.1016/j.socscimed.2017.03.009>.
- Pope, N. G. 2016. "The Effects of DACAmentation: The Impact of Deferred Action for Childhood Arrivals on Unauthorized Immigrants." *Journal of Public Economics* 143: 98–114. <https://doi.org/10.1016/j.jpubeco.2016.08.014>.
- Preston, Julia, and John H. Cushman Jr. 2012. "Obama to Permit Young Migrants to Remain in U.S." *New York Times*. <https://www.nytimes.com/2012/06/16/us/us-to-stop-deporting-some-illegal-immigrants.html>.
- Ro, Annie, and Jennifer Van Hook. 2021. "Comparing Immigration Status and Health Patterns Between Latinos and Asians: Evidence from the Survey of Income and Program Participation." *Plos One* 16 (2): 1–15. <https://doi.org/10.1371/journal.pone.0246239>
- Roth, B. 2019. "The Double Bind of DACA: Exploring the Legal Violence of Liminal Status for Undocumented Youth." *Ethnic and Racial Studies* 42 (15): 2548–65. <https://doi.org/10.1080/01419870.2018.1540790>.
- Sirriyeh, Ala. 2020. "'Dreamers', (Un)deserving Immigrants and Generational Interdependence." *Population, Space and Place* 26 (6): 1–10. <https://doi.org/10.1002/psp.2370>
- Trockel, M. T., M. D. Barnes, and D. L. Egget. 2000. "Health-Related Variables and Academic Performance Among First-Year College Students: Implications for Sleep and Other Behaviors." *Journal of American College Health* 49 (3): 125–31. <https://doi.org/10.1080/07448480009596294>.
- USCIS. 2018. "Consideration of Deferred Action for Childhood Arrivals." U.S. Citizenship and Immigration Services. <https://www.uscis.gov/archive/consideration-deferred-action-childhood-arrivals-daca>.
- Vaquera, E., E. Aranda, and I. Sousa-Rodriguez. 2017. "Emotional Challenges of Undocumented Young Adults: Ontological Security, Emotional Capital, and Well-Being." *Social Problems* 64 (2): 298–314. <https://doi.org/10.1093/socpro/spx010>.